

Abstract:

The invention relates to a method and a control unit for operating a hydraulic injection valve, which comprises at least 5 one piezoelectric actuator (2), a displaceable component (3) and a hydraulic element (9) such as bearing or a transmission system. The use of a drive voltage (U) modifies the length of an actuator (2), which makes it possible to control the stroke of the displaceable component (a valve needle 3). The inventive 10 control unit (10) produces a polarizing voltage (UB) which pre-stresses the actuator (2) and whose polarization direction is opposite to the polarization direction of said actuator (2). Said invention makes it possible to obtain the greater 15 modification of the length when the actuator (2) operates in the polarization direction than the drive voltage starts at 0 volts, as it was in practice before. Said invention makes it possible to reduce energy consumption.